



# 2000 Toxics Release Inventory

## VIRGINIA

### Reported Releases and Waste Management Activities (in pounds)

	Original Industry	New Industry	Total
On-site Releases	50,321,733	23,324,206	73,645,939
Air Emissions	40,554,859	18,662,936	59,217,794
Surface Water Discharges	8,052,505	159,837	8,212,342
Underground Injection Class I Wells	0	0	0
Underground Injection Class II-V Wells	0	0	0
On-site Land Releases to RCRA Subtitle C Landfills	49	0	49
Other On-site Land Releases	1,714,321	4,501,433	6,215,754
Off-site Releases (Transfers Off-site to Disposal)*	7,470,254	1,078,009	8,548,264
<b>Total On- and Off-site Releases</b>	<b>57,791,987</b>	<b>24,402,215</b>	<b>82,194,202</b>
Recycled On-site	119,780,119	2,564,074	122,344,193
Recycled Off-site	25,362,633	782,846	26,145,480
Energy Recovery On-site	44,857,497	0	44,857,497
Energy Recovery Off-site	8,879,913	442,506	9,322,419
Treated On-site	76,098,586	16,963,882	93,062,469
Treated Off-site**	18,137,033	1,873	18,138,906
Quantity Released On- and Off-site***	58,223,649	24,388,766	82,612,416
<b>Total Production-related Waste Managed</b>	<b>351,339,431</b>	<b>45,143,948</b>	<b>396,483,379</b>
<b>Non-production-related Waste Managed</b>	<b>138,952</b>	<b>15</b>	<b>138,967</b>

### Transfers Off-site for Further Waste Management/Disposal

Recycling	25,565,852	728,257	26,294,109
Energy Recovery	8,716,432	444,973	9,161,405
Treatment	1,512,754	3,873	1,516,627
Publicly Owned Treatment Works (POTWs)	16,686,195	256	16,686,451
Metals and Metal Compounds*	65,113	0	65,113
Non-metal TRI Chemicals**	16,621,082	256	16,621,338
Other Off-site Transfers****	0	0	0
Transfers Off-site to Disposal (not including metals to POTWs)	7,446,005	1,078,011	8,524,016
<b>Total Transfers Off-site for Further Waste Management/Disposal</b>	<b>59,927,238</b>	<b>2,255,370</b>	<b>62,182,608</b>

\* Transfers to POTWs of metals and metal compounds are included in off-site releases. Excludes transfer amounts sent for disposal to other TRI facilities reporting that amount released on-site.

\*\* Transfers to POTWs of non-metals are included in treated off-site waste management activity.

\*\*\* Excludes non-production-related releases; e.g. releases due to catastrophic events or remedial actions.

\*\*\*\* Transfers reported without a valid waste management code.

### For More Information . . .

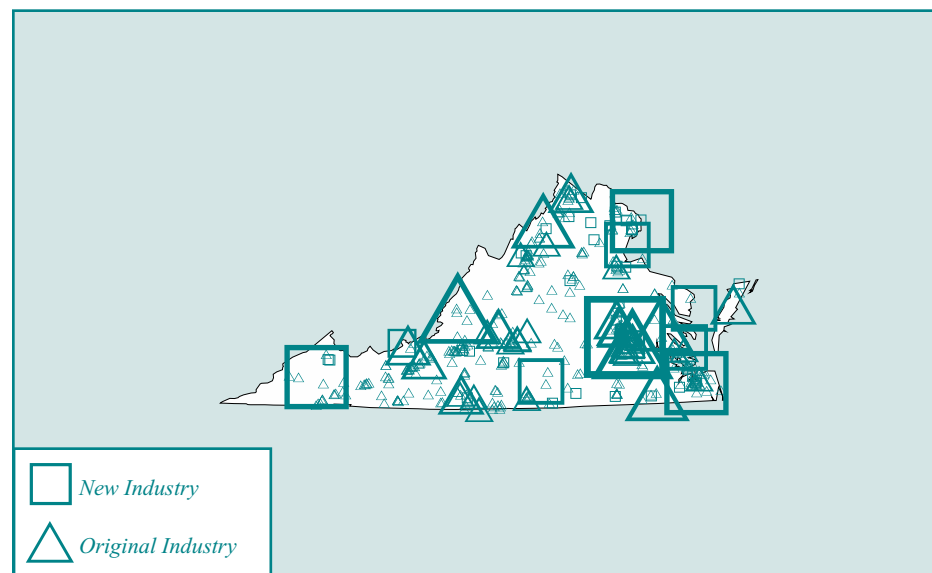
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To obtain TRI data use  
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Fax: (202) 401-2347  
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The largest marker in the map represents the largest facility for on-site releases in Virginia. All markers are proportionally-sized to represent the on-site releases at each facility within this commonwealth.

### State/TRI Data

Population	7,104,016
Square Miles	39,598
Total Facilities	481
Total Forms	1,913
Form As	257

	Original Industry	New Industry	Total
<b>National Rank for Total On- and Off-site Releases*</b>			
Rank	17	26	22
Pounds	57,791,987	24,402,215	82,194,202
<b>National Rank for Total On-site Releases**</b>			
Rank	15	26	25
Pounds	50,321,733	23,324,206	73,645,939
<b>National Rank for Total Releases within State***</b>			
Rank	15	27	23
Pounds	57,381,281	24,103,951	81,485,232
<b>National Rank for Production-related Waste Managed</b>			
Rank	22	28	25
Pounds	351,339,431	45,143,948	396,483,379

\* Includes transfers out-of-state for disposal. Excludes transfer amounts sent for disposal to other TRI facilities reporting that amount released on-site.

\*\* Includes amounts released at the facility. Excludes amounts transferred to other sites.

\*\*\* Excludes transfers for disposal sent out-of-state or sent to other TRI facilities within the state reporting that amount released on-site.



# 2000 Toxics Release Inventory

## VIRGINIA

### On-site and Off-site Releases for Top Five Chemicals Ranked on Total Releases in the State (All Chemicals)

CAS Number	Chemical	On-site Releases				Off-site Releases	Total Releases in the State**	Off-site Transfers to Disposal		
		Air Emissions Pounds	Surface Water Discharges Pounds	Underground Injection Pounds	On-site Releases to Land Pounds	Transfers Off-site to Disposal* Pounds		Transferred Into State Pounds	Transferred Within State Pounds	Transferred Out of State Pounds
7647-01-0	Hydrochloric acid	18,413,536	0	0	0	0	18,413,536	0	0	0
67-56-1	Methanol	10,409,583	26,382	0	21,250	36,000	10,493,215	1,787	36,000	0
7664-41-7	Ammonia	7,658,419	154,873	0	3,686	4,084	7,821,062	0	3,744	340
—	Nitrate compounds	4,979	7,622,454	0	61,658	20,277	7,709,368	0	11,737	8,540
108-88-3	Toluene	3,971,135	1,328	0	0	344	3,972,807	14,609	2	342

\* Excludes amounts transferred to other TRI facilities in the state reporting that amount released on-site.

\*\* The chemical ranking is based on the amounts in this column.

### On-site and Off-site Releases for PBT Chemicals Ranked on Total Releases in the State

CAS Number	Chemical	On-site Releases				Off-site Releases	Total Releases in the State**	Off-site Transfers to Disposal		
		Air Emissions Pounds	Surface Water Discharges Pounds	Underground Injection Pounds	On-site Releases to Land Pounds	Transfers Off-site to Disposal* Pounds		Transferred Into State Pounds	Transferred Within State Pounds	Transferred Out of State Pounds
—	Polycyclic aromatic compounds	19,040.84	87.97	0.00	6.69	2,102.09	21,237.59	16,574.80	119.09	1,983.00
—	Mercury compounds	4,037.36	24.76	0.00	830.64	1,732.87	6,625.63	0.00	1,627.83	105.04
7439-97-6	Mercury	214.10	0.10	0.00	27.30	24.80	266.30	0.00	17.30	7.50
191-24-2	Benzo(g,h,i)perylene	199.37	4.67	0.00	0.29	16.30	220.62	15.50	9.00	7.30
40487-42-1	Pendimethalin	5.00	5.00	0.00	0.00	0.00	10.00	0.00	0.00	0.00
—	Dioxin and dioxin-like compounds	0.23	0.01	0.00	0.03	0.11	0.39	0.00	0.11	0.00
—	<i>Dioxin and dioxin-like compounds (in grams)</i>	<i>104.291</i>	<i>6.658</i>	<i>0.000</i>	<i>14.768</i>	<i>51.013</i>	<i>176.730</i>	<i>0.000</i>	<i>51.012</i>	<i>0.000</i>
1336-36-3	Polychlorinated biphenyls (PCBs)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
309-00-2	Aldrin	—***	—	—	—	—	—	—	—	—
57-74-9	Chlordane	—***	—	—	—	—	—	—	—	—
76-44-8	Heptachlor	—***	—	—	—	—	—	—	—	—
118-74-1	Hexachlorobenzene	—***	—	—	—	—	—	—	—	—
465-73-6	Isodrin	—***	—	—	—	—	—	—	—	—
72-43-5	Methoxychlor	—***	—	—	—	—	—	—	—	—
29082-74-4	Octachlorostyrene	—***	—	—	—	—	—	—	—	—
608-93-5	Pentachlorobenzene	—***	—	—	—	—	—	—	—	—
79-94-7	Tetrabromobisphenol A	—***	—	—	—	—	—	—	—	—
8001-35-2	Toxaphene	—***	—	—	—	—	—	—	—	—
1582-09-8	Trifluralin	—***	—	—	—	—	—	—	—	—

\* Excludes amounts transferred to other TRI facilities in the state reporting that amount released on-site.

\*\* The chemical ranking is based on the amounts in this column.

\*\*\* No reports were submitted for these chemicals.



# 2000 Toxics Release Inventory

## VIRGINIA

### On-site and Off-site Releases for Top Ten Facilities Ranked on Total On-site Releases in the State (All Chemicals)

Facility, City, County	On-site Releases						Total On-site Releases* Pounds	Off-site Releases	
	Underground Injection				On-site Releases to Land			(Transfers Off-site to Disposal)	
	Air Emissions Pounds	Surface Water Discharges Pounds	Class I Wells Pounds	Class II-V Wells Pounds	RCRA Subtitle C Landfills Pounds	Other On-site Land Releases Pounds		Transferred Within State Pounds	Transferred Out of State Pounds
Chesterfield Power Station, Chester, Chesterfield	4,679,485	67,107	0	0	0	1,321,003	6,067,595	0	760
Westvaco of Virginia. Inc., Covington, Alleghany	4,652,938	146,080	0	0	0	267,281	5,066,299	0	0
Honeywell Intl. Inc. Hopewell Plant, Hopewell, Hopewell City	4,709,245	173,715	0	0	0	0	4,882,960	12,000	0
Chesapeake Energy Center, Chesapeake, Chesapeake City	2,583,504	11,113	0	0	0	769,000	3,363,617	0	0
American Electric Power Clinch River Plant, Cleveland, Russell	2,532,814	1,683	0	0	0	449,706	2,984,203	0	290
International Paper Franklin Mill, Franklin, Isle of Wight	2,575,651	130,448	0	0	0	0	2,706,099	516,963	0
Potomac River Generating Station, Alexandria, Alexandria City	2,641,405	500	0	0	0	0	2,641,905	0	222,003
Rocco Poultry Ops., Edinburg, Shenandoah	0	2,245,889	0	0	0	6,363	2,252,252	3,611	0
St. Laurent Paper Prods. Corp., West Point, King William	1,875,346	77,878	0	0	0	275,399	2,228,623	0	0
U.S. Army Radford Army Ammunition Plant, Radford, Montgomery	294,148	1,501,220	0	0	0	0	1,795,368	0	12

\* The facility ranking is based on the amounts in this column; these quantities exclude transfers out of state.

### On-site and Off-site Releases for Top Ten Facilities Ranked on Total On-site Releases in the State (PBT Chemicals)

Facility, City, County	On-site Releases						Total On-site Releases* Pounds	Off-site Releases	
	Underground Injection				On-site Releases to Land			(Transfers Off-site to Disposal)	
	Air Emissions Pounds	Surface Water Discharges Pounds	Class I Wells Pounds	Class II-V Wells Pounds	RCRA Subtitle C Landfills Pounds	Other On-site Land Releases Pounds		Transferred Within State Pounds	Transferred Out of State Pounds
Anheuser-Busch Inc., Williamsburg, James City	14,491.00	0.00	0.00	0.00	0.00	0.00	14,491.00	0.00	0.00
Barker Microfarads Inc., Hillsville, Carroll	1,851.70	0.00	0.00	0.00	0.00	0.00	1,851.70	0.00	0.00
Chesterfield Power Station, Chester, Chesterfield	1,303.50	0.00	0.00	0.00	0.00	3.00	1,306.50	0.00	0.00
Hopewell Cogeneration Facility, Hopewell, Hopewell City	1,160.20	0.00	0.00	0.00	0.00	0.00	1,160.20	0.00	0.00
Chesapeake Energy Center, Chesapeake, Chesapeake City	730.00	0.00	0.00	0.00	0.00	0.00	730.00	0.00	0.00
Westvaco of Virginia, Inc., Covington, Alleghany	498.00	20.76	0.00	0.00	0.00	79.37	598.14	0.00	0.00
Clover Power Station, Clover, Halifax	14.00	0.00	0.00	0.00	0.00	580.00	594.00	0.00	0.00
H. Warshow & Sons Inc., Tappahannock, Essex	450.00	0.00	0.00	0.00	0.00	0.00	450.00	0.00	0.00
International Paper Franklin Mill, Franklin, Isle of Wight	362.80	22.70	0.00	0.00	0.00	0.00	385.51	88.31	0.00
Possum Point Power Station, Dumfries, Prince William	361.00	2.00	0.00	0.00	0.00	6.00	369.00	0.00	0.00

\* The facility ranking is based on the amounts in this column; these quantities exclude transfers out of state.



# 2000 Toxics Release Inventory

## VIRGINIA

### Total Production-related Waste for Top Ten Facilities Ranked on Quantity Released On- and Off-site (All Chemicals)

Facility, City, County	Recycled On-site Pounds	Recycled Off-site Pounds	Energy Recovery On-site Pounds	Energy Recovery Off-site Pounds	Treated On-site Pounds	Treated Off-site Pounds	Quantity Released On- and Off-site* Pounds	Total Production-related Waste Managed Pounds	Total Non-Production-related Waste Managed Pounds
Chesterfield Power Station, Chester, Chesterfield	0	0	0	0	1,400,000	0	6,076,304	7,476,304	0
Westvaco of Virginia, Inc., Covington, Alleghany	0	0	898,800	0	20,745,490	0	5,046,968	26,691,258	0
Honeywell Intl. Inc. Hopewell Plant, Hopewell, Hopewell City	2,357,400	0	1,787,510	0	2,065,235	404,481	4,897,500	11,512,126	0
Chesapeake Energy Center, Chesapeake, Chesapeake City	0	0	0	0	500,000	0	3,362,730	3,862,730	0
Roanoke Electric Steel Corp., Roanoke, Roanoke City	0	0	0	0	0	0	3,165,838	3,165,838	0
International Paper Franklin Mill, Franklin, Isle of Wight	0	10	6,600,120	0	12,404,503	0	3,154,554	22,159,187	1
American Electric Power Clinch River Plant, Cleveland, Russell	0	51,500	0	0	510,000	0	2,984,202	3,545,702	0
Potomac River Generating Station, Alexandria, Alexandria City	0	0	0	0	222,000	0	2,872,160	3,094,160	0
Rocco Poultry Ops., Edinburg, Shenandoah	0	0	0	0	0	3,611	2,255,864	2,259,475	0
St. Laurent Paper Prods. Corp., West Point, King William	0	0	0	0	2,174	0	2,228,623	2,230,797	0

\* The facility ranking is based on the amounts in this column; these quantities exclude non-production-related releases.

### Total Production-related Waste for Top Ten Facilities Ranked on Quantity Released On- and Off-site (PBT Chemicals)

Facility, City, County	Recycled On-site Pounds	Recycled Off-site Pounds	Energy Recovery On-site Pounds	Energy Recovery Off-site Pounds	Treated On-site Pounds	Treated Off-site Pounds	Quantity Released On- and Off-site* Pounds	Total Production-related Waste Managed Pounds	Total Non-Production-related Waste Managed Pounds
Anheuser-Busch Inc., Williamsburg, James City	0	0	0	0	0	0	14,491	14,491	0
Barker Microfarads Inc., Hillsville, Carroll	0	0	0	0	0	0	1,852	1,852	0
Koppers Inds. Inc., Salem, Roanoke	0	0	0	0	1,507	4,019	1,518	7,045	0
Chesterfield Power Station, Chester, Chesterfield	0	0	0	0	0	0	1,304	1,304	0
Hopewell Cogeneration Facility, Hopewell, Hopewell City	0	0	0	0	0	0	1,160	1,160	0
Chesapeake Energy Center, Chesapeake, Chesapeake City	0	0	0	0	0	0	730	730	0
Westvaco of Virginia, Inc., Covington, Alleghany	0	0	0	0	0	0	598	598	0
Clover Power Station, Clover, Halifax	0	0	0	0	0	0	590	590	0
International Paper Franklin Mill, Franklin, Isle of Wight	0	10	0	0	0	0	474	484	0
H. Warshow & Sons Inc., Tappahannock, Essex	0	0	0	0	0	0	450	450	0

\* The facility ranking is based on the amounts in this column; these quantities exclude non-production-related releases.